

XII. *Notes on Part III. of the Catalogue of British Insects published by the Entomological Society of London; Hymenoptera [Chrysididæ, Ichneumonidæ, Braconidæ, and Evaniidæ].* By the Rev. T. A. MARSHALL, M.A., F.L.S.

[Read 4th November, 1872.]

THE compiler having willingly complied with the suggestion that no notes should be printed with the Catalogue, desires to make a few remarks upon such points as are not apparent upon the face of the work, and yet ought not to be passed over in silence. The printer's task has been well performed, the revision was executed with every care, and no table of errata is now necessary. With the single exception of p. 112, line 7 from top, *centauræ* (a misprint for *centaureæ*), it is believed that no erratum exists of a kind likely to mislead the reader.

With regard to the generic and specific names adopted, and their orthography, very few changes have been ventured upon, and those only of an obvious character, care being always taken to observe the law of priority, and in cases of misspelling to preserve as far as possible the identity of the word corrected. The cataloguer has borne in mind that his function was to register the facts observed by others in their own manner, and not to indulge in any originalities. And he has had cause to congratulate himself upon the general correctness of the received names, which compare very favourably with those of some of the other orders of insects. The following are the chief alterations which have been adopted: p. 1. *Elampus* Spin. is corrected by Förster to *Ellampus*; p. 2. *Omalus* is changed to *Homalus*; p. 19. *Exephanes* to *Exophanes*; p. 41. *Linoceras* Tasch. (1865) is preferred to *Macrobatus* Holmgr. (1854), because the latter overthrows Gravenhorst's original specific name *macrobatus*, and substitutes *clavator* Holmgr.; *Brachycentrus* is discarded for the same reason, and also because it is preoccupied in Neuroptera: for this a new name, *Cyrtocryptus*, was necessary; p. 50. *Trachynotus* is changed to *Nototrachys*, to

avoid collision with *Trachynotus* Latr. (Règne Anim. v. 14, Tenebrionidæ), both names being of the same date, 1829; p. 63. *Collyria* Schiödde is preferred to *Pachymerus* Gr., the latter being preoccupied in Hemiptera; p. 84. *Acænitus* is Latreille's own spelling, corrupted by Gravenhorst to *Acænites*, whom subsequent writers have followed; p. 85. *Ephialtes imperator* and *rex* Kriechb. divide between them *E. manifestator* of the older writers. As it is impossible now to give the name *manifestator* with certainty to either of the above species without introducing a fresh element of confusion, Kriechbaumer's names have been suffered to pass, though his method of discarding so well known a name as the Linnæan *manifestator* cannot be approved; p. 91. *Lissonota* Gr. (1829) too nearly resembles *Lissonotus* Dalm. in Schönh. Synon. Ins. iii. App. (1817), a genus of Longicornia, but as they are not quite identical, the compiler did not think himself at liberty to force in a fresh name; p. 94. *Phytodietus* Gr. is corrected to *Phytodiætus*; p. 100. *Rogas* Nees, to *Rhogas*; and p. 103. *Rhitigaster* Wesm. to *Rhytidogaster*, in accordance with the rules of Greek. This is the place to observe that in the Braconidæ many changes are proposed by Förster in his synopsis of the group (Verh. pr. Rheinl., 1862), some being in their turn liable to fresh objections. He discards *Microdus* Nees on the ground of its being only a collateral form of *Microdon*, a genus of Fishes, and substitutes for it *Eumicrodus* and *Diatmetus*. In the Catalogue, p. 108, the older names *Earinus* and *Therophilus* Wesm. are restored. *Hybrizon*, p. 109, sufficiently indicated by Fallén, takes precedence of the ill-spelt *Paxylomma* of the Enc. Méth.; and *Aspidogonus*, p. 120, is corrected for *Aspigonus*. Some incorrectly formed compounds (*Phænolyta*, *Phænocarpa*, and *Phænolexis*) have been left, as the radical fault of their structure admits of no simple remedy. The occasional slight changes of specific names are either necessitated by the gender of the generic appellation, or they are such plain cases as *pallidipes* for the abortive *pallipes*, *Bassus athaliiperdus* for *athaliæperda*, and so forth. The compiler thinks himself well rid of this trifling part of the subject; but as a Catalogue in Natural History is a thing made up of, or at least wholly dressed in, such shreds and patches, it seems requisite to state to what extent trimming and paring have been resorted to, in order to produce neatness and uni-

formity of appearance. And this of course is the only excuse for those tiresome and petty operations in which

“A’s deposed, and B with pomp restored.”

With regard to the arrangement of species, the cataloguer would gladly have placed the typical species of each genus first, and the rest in the order of their affinity to that type. But the imperfect condition of the literature relating to these insects, the absence of definitely constituted types, and the impropriety of setting up any freshly selected according to appearances, forbade the uniform application of this principle. For one reason or another, the adoption of any fixed principle throughout was equally impracticable, except that of alphabetical arrangement. This is so far from being any real system, that it is rather a confession of the utter absence of system, and moreover its adoption in this case would have been retrogression, by losing sight of such partial arrangements as have been here and there already proposed. In this difficulty then the cataloguer has been guided by what he conceived to be the highest principle applicable to each particular case, resorting, where that failed, to the next lower principle, and, as a last resource, betaking himself to alphabetical arrangement. Wherever this may be found to prevail, it must be taken to indicate the impossibility, from want of knowledge, of effecting a more satisfactory arrangement; ex. gr. *Ichneumon*, spp. 109—144, *Tryphon*, *Mesoleptus*, and *Limneria*.

The order of sequence in the synonyms is the same as that adopted in the Catalogue of Neuroptera, and which differs somewhat from that of the Aculeata. The choice of these citations, most numerous and perplexing, presented several difficulties not wholly to be overcome, and only to be mitigated by the exercise of a free discretion. It will be seen that of the mass of references given by Gravenhorst, a considerable number are omitted. They are, as a rule, dubious in different degrees, and their introduction would have greatly increased the size of the Catalogue, while at the same time they diminished its usefulness. The degree of similarity which many years ago was sufficient to satisfy entomologists of the identity of two insects, would not content the more minute observers of the present day. Without attempting then to prescribe for himself any strict rules for action in a matter requiring

perhaps a different judgment in each case, the cataloguer has aimed at excluding all matter so doubtful as to be useless, and to render the references complete in all cases of certainty. If the line waves more or less, he must shelter himself under the plea that it could not be otherwise. In working out these views, it must occasionally happen that the references do not travel back to the earliest inventor of a now unrecognizable name, but stop short at the first describer of an unmistakable thing, or in most cases, Gravenhorst, and sometimes not the ancient authorities he quotes. Priority has been a first object or hobby with the compiler, but the hobby has not been ridden to death.

Mr. Walker has remarked, at the end of his "Notes on Chalcidiae," published in the present year, that "some alterations are required in the arrangement of the families, and the genera and their respective species have yet to be examined in detail." *Pour encourager les autres*, the same judgment, or something very like it, may be pronounced upon the Ichneumonidæ. To descend no further than to the division of genus, the want of an uniform standard is very conspicuous. Some genera are eminently exclusive, and others in the highest degree latitudinarian. The 1,186 species of Ichneumonidæ are comprised in 136 genera; while the Braconidæ, numbering only 439 spp., are distributed among 125 genera, only 11 fewer than those of the tribe preceding them. This disproportion, the result of a totally different idea of Genus in different minds, is mainly due to the labours of Förster, who has established a very great number of generic divisions among the Braconidæ, founded frequently upon minute characters, not involving general appearance and structure, and which to others have seemed only of specific value. We have then at present a mass of very unequal composition, tending both ways into extremes, about half-way between which the truth in other matters is commonly considered to lie. General resemblance and structure (interpreted with a certain moderation) is probably the central point at which these oscillations must cease. Thus, *Enicospilus* and *Ophion* fall conveniently into one genus, *Ophion*; *Schizoloma*, *Exochilum*, *Heteropelma*, *Anomalon*, *Agrypon* and *Trichomma*, at present only separable with a powerful lens, fall easily into *Anomalon*, and so forth. But these considerations, being beyond the province of a compiler, have not been allowed to appear in the Catalogue.

So far as it is derived from books, the Catalogue tells its own story, but this is the place for mentioning some other sources from which it has been materially enriched. These sources were, correspondence with the regretted names of Haliday and Desvignes—the collection of the latter, containing a great number of named species not before published as British—inspection of other collections, especially Mr. Walker's, and including many small contributions from different parts of the country—and, lastly, the compiler's own efforts in collecting and determining fresh species. Among the blanks in the British list to which his attention was necessarily called, may be mentioned *Pezomachus*, numbering now 48 species (the difficulty of determining which will be duly estimated by any one who makes the attempt), *Bracon*, *Chelonus*, and other groups not included in Haliday's "Essay on Parasitic Hymenoptera." It would be tedious to particularize all the species introduced for the first time, but a general idea of their numbers may be formed by comparing certain genera with the same in the few previous lists; yet the compiler is well aware that he has only added as it were a stone or two to a heap. New species, generally of small size, are everywhere easily to be discovered by collectors; and more than a hundred, probably undescribed, are still in the writer's hands. Quite recently a remarkable addition to the larger Ophionidæ has become known to Mr. Smith, and will shortly receive due attention. Many additions may be expected to the following genera, among others: *Phygadeuon*, *Hemiteles*, *Limneria*, *Mesochorus*, *Orthocentrus*, *Bracon*, *Aphidius*, *Microgaster*—and especially to *Pezomachus*. None of the peculiarly British forms of this numerous genus appear in Förster's monograph. The species of *Microgaster*, described independently and simultaneously by several writers, are in the same sort of confusion as to their synonyms, as—say, for instance, *Mylabris* in the Coleoptera—though their difficulties are rather owing to art than nature. It is much to be regretted that so wide and interesting a field for specialists with leisure should continue year after year unoccupied.

A few doubtful natives, having for the present the benefit of the doubt, appear in the Catalogue. Thus, *Euchræus quadratus*, p. 5, is liable to strong suspicion of an alien origin. Mr. Smith says in litt. that he has good grounds for supposing that the specimen described by

Mr. Shuckard was not taken at Swansea. The name *quadratus* should be changed, as *E. quadratus* Dahlb. is a different insect. The other species whose British origin requires confirmation are *Listrodromus lapidator*, p. 25; *Eurylabus larvatus*, p. 26; *Pristiceros serrarius*, *ibid.*; *Linoceras macrobatus*, p. 41; *Nematopodius formosus*, p. 42; *Catalytus fulveolatus*, p. 45; *Agrothereutes abbreviator*, *ibid.*; *Nototrachys foliator*, p. 50; *Scolobates* (both spp.), p. 65; *Sphinctus serotinus*, p. 79; *Theronia flavicans*, p. 86; *Rhytidogaster irrorator*, p. 103; and *Gymnoscelus tardator*, p. 119.

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